

Title (en)
Tube carrier apparatus.

Title (de)
Rohrträgergerät.

Title (fr)
Appareil porteur pour tubes.

Publication
EP 0611581 A3 19960918 (EN)

Application
EP 94102234 A 19940214

Priority
JP 4996093 A 19930215

Abstract (en)

[origin: EP0611581A2] The tube carrier apparatus (1A) is composed of carrier rails (2, 3), at least a pair of rollers (5, 5) provided so as to pinch a flexible tube (30) therebetween, and a driving section (6) for rotating the rollers (5, 5). The carrier rails (2, 3) are formed with a groove (4) as a passage for the tube through which the tube is to be carried in the longitudinal direction thereof. When the motor (6) is driven, both the rollers (5, 5) are rotated in two different rotative directions, so that the tube (30) is pinched between the rotating rollers (5, 5) and the tube is then carried in accordance with the rotation of the rollers. The tube carrier apparatus is simple in structure and small in size. Alternatively, the apparatus (1B, 1C, 1D, 1E) comprises at least one first passage (81, 131, 181, 221) through which the tube is adapted to pass, a plurality of second passages (71, 72; 141, 151; 171, 191; 231) through which the tube is to be carried, a switching member rotatably or movably disposed between the first and second passages and a driving mechanism (10, 21) for rotating or moving the switching member (9, 16, 20, 24) and including a connection passage (91, 92; 161, 162; 201, 202; 241) for selectively connecting the first passage and any one of the second passages. The switching member (9, 16, 20, 24) is rotated or moved by the driving mechanism (10, 21) to select connection between the first tube passage (81, 131, 181, 221) and any one of the second passages (71, 72; 141, 151; 171, 191; 231). <IMAGE>

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CPC (source: EP US)

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B29C 66/54 (2013.01 - EP US); **B29C 66/71** (2013.01 - EP US)

Citation (search report)

- [XA] US 4354626 A 19821019 - BRANDEWIE JOSEPH E, et al
- [XA] US 4140739 A 19790220 - COTTEN ROGER C
- [E] EP 0639384 A2 19950222 - TERUMO CORP [JP]
- [XY] FR 2112440 A1 19720616 - KRUPP GMBH
- [YA] FR 1525466 A 19680517 - HEBERLEIN & CO AG
- [YA] GB 2106470 A 19830413 - BRITISH UNITED SHOE MACHINERY
- [Y] DE 1103250 B 19610323 - DEUTSCHE BUNDESPOST
- [A] FR 2093048 A5 19720128 - METALURGI INTREPRINDEREIA
- [A] GB 2137582 A 19841010 - SULLIVAN DENIS P O
- [A] US 3838688 A 19741001 - MAY E, et al
- [A] US 2603343 A 19520715
- [X] PATENT ABSTRACTS OF JAPAN vol. 008, no. 154 (M - 310) 18 July 1984 (1984-07-18)
- [A] PATENT ABSTRACTS OF JAPAN vol. 017, no. 271 (M - 1417) 26 May 1993 (1993-05-26)
- [A] PATENT ABSTRACTS OF JAPAN vol. 004, no. 139 (M - 034) 30 September 1980 (1980-09-30)
- [A] PATENT ABSTRACTS OF JAPAN vol. 010, no. 353 (M - 539) 28 November 1986 (1986-11-28)
- [A] PATENT ABSTRACTS OF JAPAN vol. 010, no. 167 (M - 488) 13 June 1986 (1986-06-13)

Cited by
EP0639384A3; US5674741A; WO2008061388A1

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